

19/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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05596648 **Image available**
PORTABLE TYPE ELECTRONIC EQUIPMENT

PUB. NO.: 09-211448 [JP 9211448 A]
PUBLISHED: August 15, 1997 (19970815)
INVENTOR(s): MATSUKAWA HIDEKI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
or Corporation), JP (Japan)
APPL. NO.: 08-017705 [JP 9617705]
FILED: February 02, 1996 (19960202)

...JAPIO KEYWORD: Light Emitting Diodes , LED)

ABSTRACT

...SOLUTION: A **portable** type **terminal** equipment is provided which has a fluorescence tube, a lamp, and a LED 10 **set** on a main body face of the portable equipment 1 having a display part 2 using a **color** filter or on the cover side of the display part 2, or makes them illuminate...

...the spectral energy distribution of the fluorescence tube, the lamp, and the LED 10 is **set** to match a **color** of the **color** filter. Since the equipment has no **back light**, it does not have excess space nor weight, and can provide a configuration sufficient to give an excellent contrast for a display performance, a **brightness**, and a hue, and the use of this configuration makes a display sufficiently recognizable also in a dark place even with a **color** display reflection type liquid crystal display.

19/3,K/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

014144132 **Image available**
WPI Acc No: 2001-628343/200173
Related WPI Acc No: 2000-516382
XRPX Acc No: N01-468606

Method of controlling RGB back light display device for a
portable electronic device by maintaining sum of currents flowing
through light emitters at set current value using current controller

Patent Assignee: NEC CORP (NIDE)

Inventor: NAKAMURA T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2355841	A	20010502	GB 20001316	A	20000120	200173 B
			GB 20011988	A	20010125	

Priority Applications (No Type Date): JP 9912320 A 19990120

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2355841	A		32	G09G-003/34	Derived from application GB 20001316

Method of controlling RGB back light display device for a
portable electronic device by maintaining sum of currents flowing
through light emitters at set current value using current controller

Abstract (Basic):

... An image is displayed on a display device at given **brightness**.
A **color** of the image displayed on the display device is changed while
maintaining the **brightness** of the image at a **set** value when the
color is changed. The display device has a number of light emitters
such as red, green and blue **LEDs** (1-3) by maintaining a sum of
currents flowing through the light emitters at a **set** current value
using a current controller (14).

... In a **back - light** display device of a **portable** electronic device .

...

...Capable of developing a desired **color** for display and maintaining **intensity** of **brightness** regardless of a displayed **color** .

...

...The drawing is a circuit diagram of one embodiment of an **RGB back light** display device for a **portable** electronic device according to the present invention...

...red, green and blue **LEDS** (1-3

...Title Terms: **RGB** ;

25/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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06324695 **Image available**
DEVICE AND METHOD FOR DISPLAYING **BACKLIGHT** OF **PORTABLE TELEPHONE SET**

PUB. NO.: 11-266295 [JP 11266295 A]
PUBLISHED: September 28, 1999 (19990928)
INVENTOR(s): MATSUSHITA AKEMASA
APPLICANT(s): NEC SAITAMA LTD
NEC CORP
APPL. NO.: 10-065505 [JP 9865505]
FILED: March 16, 1998 (19980316)

DEVICE AND METHOD FOR DISPLAYING **BACKLIGHT** OF **PORTABLE TELEPHONE SET**

ABSTRACT

PROBLEM TO BE SOLVED: To set **backlight** in color that is preferred by a user and is easy to see by including plural **pulse width modulator** circuits which change the pulse width in a controlling means, inputting pulses outputted from plural **pulse width modulator** circuits to plural LED drive transistors and making plural **light - emitting diodes** emit light by outputs of the plural LED drive transistors.

SOLUTION: An output of a 1st **PWM** circuit 3 of a control means 2 is connected to the base of a 1st...

... transistor 6 is grounded and an output of the collector is connected to a 1st **light - emitting diode** 9 which emits light in red. Similarly, an output of a 2nd **PWM** circuit 4 is grounded to the emitter of a 2nd LED drive transistor 7 and an output of the collector is connected to a 2nd **light - emitting diode** 10 which emits light in green. An output of a 3rd **PWM** circuit 5 is grounded to the emitter of a 3rd LED drive transistor 8, and...

25/3,K/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
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05881088 **Image available**
PORTABLE TERMINAL

PUB. NO.: 10-164188 [JP 10164188 A]
PUBLISHED: June 19, 1998 (19980619)
INVENTOR(s): INOUE SATOSHI
APPLICANT(s): KYOCERA CORP [358923] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 08-319264 [JP 96319264]
FILED: November 29, 1996 (19961129)

PORTABLE TERMINAL
...JAPIO KEYWORD: **Light Emitting Diodes , LED**)

ABSTRACT

PROBLEM TO BE SOLVED: To decrease the turn-on frequency and time of a **back light** and to reduce the power consumption by preparing a light detection circuit including a photodetector...

...circuit and also to evenly illuminate a large LCD part by increasing the number of **back light** LED...

...an LCD part 2. Then the circuit 1 converts the peripheral light quantity of a **portable terminal** into **voltage** to input it to an A/D port of a CPU 3 and then converts the **voltage** value proportional to the light quantity into the digital value. The CPU 3 controls a **back light** based on the result of comparison obtained between the digital **voltage** value and the prescribed value. That is, it's decided that the part 2 is satisfactorily bright and the supply of power is cut off to a **back light**

driver 5 of a power circuit 4 when the light quantity is larger than the prescribed value. Then all **back light** LED 6 are turned off. When the light quantity is smaller than the prescribed value...

25/3,K/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
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05862375 **Image available**
PORTABLE TERMINAL EQUIPMENT

PUB. NO.: 10-145475 [JP 10145475 A]
PUBLISHED: May 29, 1998 (19980529)
INVENTOR(s): TSUNODA HISAMI
URABE KENZO
ONO YASUHIRO
SUZUKI HIROSHI
APPLICANT(s): KOKUSAI ELECTRIC CO LTD [000112] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 08-294763 [JP 96294763]
FILED: November 07, 1996 (19961107)

PORTABLE TERMINAL EQUIPMENT
...JAPIO KEYWORD: **Light Emitting Diodes** , LED)

ABSTRACT

PROBLEM TO BE SOLVED: To improve convenience by easily discriminating the operating state of **portable terminal** equipment by providing light emitting elements in plural colors as **backlights** for a liquid crystal display part and changing display colors on the liquid crystal display...

... 13 supplies power to respective parts and outputs a signal expressing the quantity of stored **electricity** to a control part 11. While receiving the input of signal expressing the quantity of stored **electricity** from the battery, corresponding to that quantity of stored **electricity** , the control part 11 turns on or turns off a green LED 17 or...

... liquid crystal display part 19 according to the patterns of light emission stored in a **backlight** color setting memory 16. Namely, when sufficient **electricity** is stored in the battery, the green LED 17 is turned on and the red LED 18 is turned off. When **electricity** stored in the battery is lacked, the green LED 17 is turned off and the...

25/3,K/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
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05790953 **Image available**
PORTABLE TERMINAL DEVICE AND HEAD MOUNT DISPLAY

PUB. NO.: 10-074053 [JP 10074053 A]
PUBLISHED: March 17, 1998 (19980317)
INVENTOR(s): SATO YASUSHI
APPLICANT(s): KAWAI MUSICAL INSTR MFG CO LTD [350908] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 08-248756 [JP 96248756]
FILED: August 30, 1996 (19960830)

PORTABLE TERMINAL DEVICE AND HEAD MOUNT DISPLAY
...JAPIO KEYWORD: **Light Emitting Diodes** , LED)

ABSTRACT

PROBLEM TO BE SOLVED: To provide a **portable terminal device** which consumes less electric power and has excellent operability...

...is formed as a head mount display for the single eye. The need for a

back light is eliminated by adopting a liquid crystal panel of a transmission type. The display device...
... solar battery 111. The electric power generated by this solar battery 111 is used as **power source** electric power.

25/3,K/5 (Item 5 from file: 347)
DIALOG(R)File 347:JAPIO
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05740029 **Image available**
PORTABLE TERMINAL EQUIPMENT

PUB. NO.: 10-023129 [JP 10023129 A]
PUBLISHED: January 23, 1998 (19980123)
INVENTOR(s): KONISHI YUSUKE
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 08-176577 [JP 96176577]
FILED: July 05, 1996 (19960705)

PORTABLE TERMINAL EQUIPMENT
...JAPIO KEYWORD: **Light Emitting Diodes** , LED); R130 (ELECTRIC COMMUNICATIONS

ABSTRACT
PROBLEM TO BE SOLVED: To reduce power consumption by **backlight** .

...

...is discriminated in the step 3. In the case of the automatic mode (Y), a **current** time is read from a real time clock RTC in the step 4 and whether ...

... not a prescribed lighting time is reached in the step 5 is discriminated. When the **current** time enters the lighting time (Y), control of lighting for 10sec, for example, is applied to a **back light** lighting section in the step 6. Moreover, another usual processing is conducted in the step

25/3,K/6 (Item 6 from file: 347)
DIALOG(R)File 347:JAPIO
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05646519 **Image available**
PORTABLE TYPE RADIO COMMUNICATION EQUIPMENT AND ILLUMINATION CONTROL METHOD THEREFOR

PUB. NO.: 09-261319 [JP 9261319 A]
PUBLISHED: October 03, 1997 (19971003)
INVENTOR(s): TERAJIMA KAZUHIKO
NAKAZAWA TAKAKI
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 08-090556 [JP 9690556]
FILED: March 19, 1996 (19960319)

...JAPIO KEYWORD: **Light Emitting Diodes** , LED)

ABSTRACT
PROBLEM TO BE SOLVED: To avoid the further **voltage** drop of a battery **voltage** during a transmission period concerning a time-division multiple access(TDMA) system **portable telephone** .

...
...SOLUTION: In the TDMA system **portable telephone** , the **PWM** drive of **backlight** of a liquid crystal display 16 is performed. This telephone is

provided with a register 42 for holding the set value of pulse width of **PWM** driving and a decoder 41 for decoding the count value of a time base counter...

...cutting off power supply from a secondary battery 19 to a white electric bulb for **backlight**. Corresponding to the detection output of a detection circuit 47 for the terminal **voltage** of the secondary battery 19, the power supply cut-off due to this signal Sch

25/3,K/7 (Item 7 from file: 347)
DIALOG(R)File 347:JAPIO
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05403765 **Image available**
PORTABLE TELEPHONE SET

PUB. NO.: 09-018565 [JP 9018565 A]
PUBLISHED: January 17, 1997 (19970117)
INVENTOR(s): TAKAGI KOTARO
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 07-183375 [JP 95183375]
FILED: June 27, 1995 (19950627)

PORTABLE TELEPHONE SET
...JAPIO KEYWORD: **Light Emitting Diodes**, LED); R131 (INFORMATION
PROCESSING

ABSTRACT

PURPOSE: To use the **portable telephone** set which can be mounted on a vehicle for a long time although a midget lamp is used as the **back light** for the LCD of the **portable telephone** set...

...CONSTITUTION: This **portable telephone** set is provided with the LCD 14 which displays various information and a small-sized incandescent lamp 41 which lightens the LCD 14. Further, plural keys 15 and 16 and **LEDs** 43N-43N which lighten the keys 15 and 16 are provided. When the **portable telephone** set is not connected to an external **power source**, the small-sized incandescent lamp 41 and **LEDs** 43A-43N are turned on for a specific time at key input time and termination time. When the **portable telephone** set is connected to some external **power source**, the **LEDs** 43A-43N are always turned on and the small-sized incandescent lamp 41 is turned...

25/3,K/8 (Item 8 from file: 347)
DIALOG(R)File 347:JAPIO
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04150628 **Image available**
PORTABLE POSITION SURVEYING DEVICE

PUB. NO.: 05-142328 [JP 5142328 A]
PUBLISHED: June 08, 1993 (19930608)
INVENTOR(s): KOMAKI NORIO
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 03-302935 [JP 91302935]
FILED: November 19, 1991 (19911119)
JOURNAL: Section: P, Section No. 1616, Vol. 17, No. 522, Pg. 146,
September 20, 1993 (19930920)

PORTABLE POSITION SURVEYING DEVICE
...JAPIO KEYWORD: **Light Emitting Diodes**, LED)

ABSTRACT

PURPOSE: To reduce the consumption of **electricity** for prolonging the

period of usability of a position surveying device and make it possible...

...CONSTITUTION: Illuminating means 15, 16 consist of LED are arranged for **backlight** illumination of a display means 12 and an operation means 13 with consideration to the...

25/3,K/9 (Item 9 from file: 347)
DIALOG(R)File 347:JAPIO
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04103695 **Image available**
PORTABLE RADIO TELEPHONE SYSTEM

PUB. NO.: 05-095395 [JP 5095395 A]
PUBLISHED: April 16, 1993 (19930416)
INVENTOR(s): KITAMURA SHINICHI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 03-253352 [JP 91253352]
FILED: October 01, 1991 (19911001)
JOURNAL: Section: E, Section No. 1415, Vol. 17, No. 444, Pg. 103, August 16, 1993 (19930816)

PORTABLE RADIO TELEPHONE SYSTEM
...JAPIO KEYWORD: **Light Emitting Diodes** , LED)

ABSTRACT

...night by turning on a light source provided on an on-vehicle holder when a **portable radio telephone** main body is mounted on the on-vehicle holder...

...CONSTITUTION: By using a car battery as a **power source** , an on-vehicle holder 11 having a charging function is provided with a charging circuit 12 which charges a battery 2 of a **portable radio telephone** main body. This battery circuit 12 is connected with a **power source** cord 14 supplying power from the car battery and an external light source 15 for a **back light** placed at the opposite position to a light transmission plate end part 7 of a...

25/3,K/10 (Item 10 from file: 347)
DIALOG(R)File 347:JAPIO
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03981445 **Image available**
PORTABLE TELEPHONE TERMINAL EQUIPMENT

PUB. NO.: 04-346545 [JP 4346545 A]
PUBLISHED: December 02, 1992 (19921202)
INVENTOR(s): TOMII YUTAKA
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 03-149498 [JP 91149498]
FILED: May 24, 1991 (19910524)
JOURNAL: Section: E, Section No. 1354, Vol. 17, No. 203, Pg. 118, April 21, 1993 (19930421)

PORTABLE TELEPHONE TERMINAL EQUIPMENT
...JAPIO KEYWORD: **Light Emitting Diodes** , LED)

ABSTRACT

... enable a user to easily and surely confirm a battery alarm function indispensable to a **portable telephone** set...

...A liquid crystal display LCD 1 is controlled by a control circuit 3, and a **back light** 2 of the LCD 1 contains plural **light emitting diodes** LED of different emitting colors. The terminal **voltage** of a battery 8 is transmitted to the circuit 3 as the digital information through a D/A

converter 7. Then the emitting colors of the **LEDs** of the light 2 are changed when the terminal **voltage** is reduced less than a prescribed level.

25/3,K/11 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

012707361 **Image available**
WPI Acc No: 1999-513470/199943
XRPX Acc No: N99-383109

Lighting system for permeable LCD panel - shifts phase of multiple LED set sequentially and impresses driving pulse to transistors

Patent Assignee: SONY CORP (SONY)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11223805	A	19990817	JP 9827607	A	19980209	199943 B

Priority Applications (No Type Date): JP 9827607 A 19980209

Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
JP 11223805 A 5 G02F-001/133

...Abstract (Basic): NOVELTY - The **back light** (27A) has several set of white **LEDs** (7a-7m, 8a-8m, 9a-9m) mutually connected in parallel. The illuminating light from **back light** is radiated to LCD panel (1). A controller (2) of control unit (30) shift the...

...USE - For illuminating permeable LCD panel of OA **apparatus** , video camera and **portable telephone** .

...

...ADVANTAGE - Reduces the noise **current** flowed to the light emission source and outputs stable white light. DESCRIPTION OF DRAWING(S...

...part of lighting system. (1) LCD panel; (2) Controller; (7a-7m, 8a-8m, 9a-9m) **LEDs** ; (18-20) Transistors; (27A) **Back light** ; (30) Control unit

25/3,K/12 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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011916608 **Image available**
WPI Acc No: 1998-333518/199829
XRPX Acc No: N98-260276

LCD device e.g. for cellular telephone - has phosphorescent layer emitting light at predetermined frequency and intensity after stimulation by backlight LED or ambient light between front and rear light transmissive panels

Patent Assignee: ERICSSON INC (TELF)
Inventor: FLYNN J M
Number of Countries: 078 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9825175	A1	19980611	WO 97US22029	A	19971208	199829 B
AU 9853690	A	19980629	AU 9853690	A	19971208	199845
US 5815228	A	19980929	US 96761176	A	19961206	199846

Priority Applications (No Type Date): US 96761176 A 19961206

Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
WO 9825175 A1 E 25 G02F-001/1335

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA

UG UZ VN YU ZW

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GR IE IT

KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9853690 A G02F-001/1335 Based on patent WO 9825175

US 5815228 A G02F-001/1335

LCD device e.g. for cellular telephone - ...

...has phosphorescent layer emitting light at predetermined frequency and intensity after stimulation by backlight LED or ambient light between front and rear light transmissive panels

...Abstract (Basic): A light emitting diode (62), for illuminating an LCD display, is located next to the phosphorescent layer with the diode being powered by a voltage pulse train having a low duty cycle . The phosphorescent layer may be provided by coating the rear polariser of the display with...

...ADVANTAGE - Has reduced power consumption, with improved backlighting performance...

?

28/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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011591037 **Image available**
WPI Acc No: 1998-008166/199801
Related WPI Acc No: 1995-254515
XRAM Acc No: C98-002848
XRPX Acc No: N98-006463

Portable **electronic** device with a miniature virtual image display -
in which a chip with an LED array, a window frame, a mounting board
carrying control circuits and image optics are mounted so as to minimise
total package size

Patent Assignee: MOTOROLA INC (MOTI)
Inventor: NELSON R J; STAFFORD J W
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5689279	A	19971118	US 94216995	A	19940324	199801 B
			US 95415286	A	19950403	

Priority Applications (No Type Date): US 94216995 A 19940324; US 95415286 A
19950403

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5689279	A	18	G09G-003/32		Div ex application US 94216995 Div ex patent US 5432358

Portable **electronic** device with a miniature virtual image display...

...Abstract (Basic): **Portable** electronic **device** with a visual display
has a miniature virtual image display with a viewing aperture and
includes a chip (10) with a pixel array of light emitting devices (
LEDs) which cooperate to generate a real image. The electrodes of the
LEDs are connected to external connection and mounting pads at the
edges of the chip. A...

...substrate. A mounting board (55) is provided with driver and controller
circuits (57) for the **LEDs** mounted on one side with electrical
connection through to the second side (58) on which...

...USE - as a **portable** communications **device** , especially a **cellular**
telephone , two-way **radio** or pager (claimed) for eg police or
security forces in which visual information of eg...

...greatly reduced without the need to reduce the size of the display
array. A small **handheld** **device** may easily include a 200 x 200 LED
array

International Patent Class (Main): G09G-003/32

28/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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011572609 **Image available**
WPI Acc No: 1997-549090/199750
XRPX Acc No: N97-457865

Smart driver for array of LEDs e.g. for portable electronic device
display - uses controlled power supply with terminals coupled to column
and row drivers and control terminal coupled to control power applied
between terminals

Patent Assignee: MOTOROLA INC (MOTI)
Inventor: NORMAN M; SO F; WEI C; NORMAN M P
Number of Countries: 007 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5684368	A	19971104	US 96660827	A	19960610	199750 B

EP 813180	A1	19971217	EP 97109106	A	19970605	199804
JP 10063228	A	19980306	JP 97165112	A	19970605	199820
TW 375726	A	19991201	TW 97105520	A	19970428	200042
CN 1179586	A	19980422	CN 97105444	A	19970609	200222

Priority Applications (No Type Date): US 96660827 A 19960610

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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US 5684368	A		8	G05F-001/00	
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EP 813180	A1	E	11	G09G-003/32	
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Designated States (Regional): DE FR GB

JP 10063228	A		8	G09G-003/32	
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TW 375726	A			G09G-003/20	
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CN 1179586	A			G09G-003/32	
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Smart driver for array of LEDs e.g. for portable electronic device display...

...Abstract (Basic): A smart driver in combination with an **light emitting diode** including a column driver coupled to one terminal of the light emitting device and a...

...USE/ADVANTAGE - For driving arrays of **light - emitting diodes (LEDs)** as displays in **portable electronic devices** . Capable of maintaining the brightness of each light-emitting device in the array relatively constant...

...International Patent Class (Main): **G09G-003/32**

28/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011484136 **Image available**

WPI Acc No: 1997-462041/199743

XRPX Acc No: N97-384750

LED drive circuit for portable device e.g. CD player - has constant current circuit which drives several LEDs connected to its output end through conductive material

Patent Assignee: KENWOOD CORP (TRIR)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9212130	A	19970815	JP 9633147	A	19960129	199743 B

Priority Applications (No Type Date): JP 9633147 A 19960129

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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JP 9212130	A		4	G09G-003/32	
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LED drive circuit for portable device e.g. CD player...

...has constant current circuit which drives several LEDs connected to its output end through conductive material

...Abstract (Basic): PCB is connected to a first PCB (10) through a flexible printing substrate (30). Multiple **LEDs** are connected mutually in the first PCB...

...One end of these **LEDs** are connected electrically to the output end of the booster circuit. A conductive material (32) made of polyethylene telephthalate, connects the other end of **LEDs** to the output end of the constant current circuit. The **LEDs** are driven by constant current output by the current circuit...

International Patent Class (Main): **G09G-003/32**

28/3,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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011375124 **Image available**
WPI Acc No: 1997-353031/199733
XRPX Acc No: N97-292493

Drive apparatus for array of organic light emitting diodes - has switches connected to current source or rest potential, several more switches are connected to power source, array has rows and columns of light emitting diodes with one contact to first switches and one contact to second

Patent Assignee: MOTOROLA INC (MOTI)
Inventor: NORMAN M P; RHYNE G W; WILLIAMSON W L
Number of Countries: 005 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 784305	A1	19970716	EP 96120565	A	19961220	199733 B
JP 9281902	A	19971031	JP 9713130	A	19970108	199803
US 5719589	A	19980217	US 96584827	A	19960111	199814

Priority Applications (No Type Date): US 96584827 A 19960111

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 784305	A1	E	9	G09G-003/32	
Designated States (Regional): DE FR GB					
JP 9281902	A		9	G09F-009/33	
US 5719589	A		9	G09G-003/32	

Drive apparatus for array of organic light emitting diodes - ...

...potential, several more switches are connected to power source, array has rows and columns of light emitting diodes with one contact to first switches and one contact to second

...Abstract (Basic): switches (40) are connected to a power source (45). An array includes several rows of **light emitting diodes** and a column of **light emitting diodes**. Each diode has a contact connected to the first switches and a second contact connected...

...USE/ADVANTAGE - For small **portable electronic devices** e.g. pagers, **cellular** and portable phones, two-way radios, data banks. Provides **light emitting diode** array and driving apparatus in which column charges are rapidly removed to obtain high quality...

...Abstract (Equivalent): switches (40) are connected to a power source (45). An array includes several rows of **light emitting diodes** and a column of **light emitting diodes**. Each diode has a contact connected to the first switches and a second contact connected...

...USE/ADVANTAGE - For small **portable electronic devices** e.g. pagers, **cellular** and portable phones, two-way radios, data banks. Provides **light emitting diode** array and driving apparatus in which column charges are rapidly removed to obtain high quality...

...International Patent Class (Main): G09G-003/32

28/3,K/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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011113365 **Image available**
WPI Acc No: 1997-091290/199709
XRPX Acc No: N97-075213

Light - emitting diode display for showing various data e.g. character, numerical character, symbol - has display screen whose display contents are altered and displayed by passing signal to infrared light receiver through infrared remote control unit which is sepd. from display

Patent Assignee: YAMASHITA DENKI KK (YAMA-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8328510	A	19961213	JP 95155285	A	19950530	199709 B

Priority Applications (No Type Date): JP 95155285 A 19950530

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8328510	A	5	G09G-003/32	

Light - emitting diode display for showing various data e.g.
character, numerical character, symbol...

...whose display contents are altered and displayed by passing signal to
infrared light receiver through infrared remote control unit which
is sepd. from display

...Abstract (Basic): The display has a display screen (1) made of several
arranged light - emitting diodes . A controller (7) regulates the
display data. A driving unit (6) controls the ON-OFF switching of the
LEDs in the display screen. An infrared light receiver (2a) informs
the controller that an input...

...are altered and displayed by passing the signal to the infrared light
receiver through an infrared remote control unit which is sepd.
from the display...

International Patent Class (Main): G09G-003/32

28/3,K/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010849165 **Image available**

WPI Acc No: 1996-346118/199635

XRPX Acc No: N96-291410

Portable information display terminal for newspaper printing press -
has display part with LED which reproduces images based on serial data
output from second output unit

Patent Assignee: HITACHI LTD (HITA)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8160884	A	19960621	JP 94299750	A	19941202	199635 B

Priority Applications (No Type Date): JP 94299750 A 19941202

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8160884	A	21	G09F-009/33	

Portable information display terminal for newspaper printing press...

...Abstract (Basic): data reception units in parallel as per arbitrary
timing. A data display part has multiple LEDs which emits light based
on output of second output unit...

...International Patent Class (Additional): G09G-003/32

28/3,K/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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004737098

WPI Acc No: 1986-240440/198637

XRPX Acc No: N86-179656

Hazardous material handling information system for emergency services -
uses microprocessor to accept data and generate LCD display of
appropriate hazard handling information

Patent Assignee: BATAILLE G (BATA-I)

Inventor: BATAILLE G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2576699	A	19860801	FR 851167	A	19850125	198637 B

Priority Applications (No Type Date): FR 851167 A 19850125

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
FR 2576699	A	13		

...Abstract (Basic): The information system comprises a **portable unit** which uses a microprocessor to accept input data on the nature of the hazardous material and to then signal, through **light - emitting diodes** , the appropriate actions to take in overcoming the hazard...

...a variety of hazards is marked on the front panel of the unit, with a **light - emitting diode** placed beside each entry in the response list. The microprocessor illuminates the diodes appropriate to...

...International Patent Class (Additional): **G09G-003/32**

32/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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05738622 **Image available**
LIGHTING SYSTEM

PUB. NO.: 10-021722 [JP 10021722 A]
PUBLISHED: January 23, 1998 (19980123)
INVENTOR(s): MOCHIZUKI NORITAKA
APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 08-190110 [JP 96190110]
FILED: July 01, 1996 (19960701)

...JAPIO KEYWORD: **Light Emitting Diodes** , LED)

ABSTRACT

... controlling the luminance distribution and/or spectral distribution on the light emitting surface of a **back light** , and displaying a full **color** image with uniform **brightness** , high contrast, and high chroma...

... light source is incident on a light transmitting body 1, a light flux from a **plurality** of openings of a mask 2 arranged on one surface of the light transmitting body 1 is incident in a hologram element having a **plurality** of unit holograms 4-i through an array-shaped light collecting element, the light flux is spectrally diffracted in a **plurality** of light fluxes having different wave length with the unit hologram, and collected in the desired position at a **predetermined** spatial cycle. The light source has a light emitting element group comprising a **plurality** of light emitting elements having the central wave length of light emission in the central wave length of a **plurality** of light fluxes produced by the spectral diffraction of the unit hologram 4-i.

32/3,K/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2002 JPO & JAPIO. All rts. reserv.

04466133 **Image available**
LIQUID CRYSTAL DISPLAY DEVICE

PUB. NO.: 06-110033 [JP 6110033 A]
PUBLISHED: April 22, 1994 (19940422)
INVENTOR(s): HIROSE SATOSHI
SUZUKI SHOJI
ENDO ATSUSHI
APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 04-257712 [JP 92257712]
FILED: September 28, 1992 (19920928)
JOURNAL: Section: P, Section No. 1773, Vol. 18, No. 387, Pg. 55, July 20, 1994 (19940720)

...JAPIO KEYWORD: **Light Emitting Diodes** , LED)

ABSTRACT

PURPOSE: To obtain the liquid crystal display device which has high resolution and high **brightness** by emitting lights the three primary **colors** in order by a **back light** source for **color** display and supplying pixel signals to transparent pixel electrodes in synchronism with the light emission times of the respective **colors** .

...

...CONSTITUTION: The **back light** source 28 is arranged behind a liquid crystal panel 26 and used for **color** display. On a substrate 19, red, green, and blue **LEDs** 30, 31, and 32 which emit the light of the primary

colors and a driving part 33 which makes them to illuminate in specific order, for example, field by field, for a specific time are provided. A transmission and diffusion plate 34 is arranged between the liquid crystal panel 26 and back light source 28 and makes the light of the back light source 28 uniform and planar. Then pixels supplied to the transparent pixel electrodes are varied in transmissivity in synchronism with the illumination times of the respective primary colors of the back light source 28, and a developed color and its brightness are determined by the transmissivity of the three successive primary colors; and a multi-colored display is made by one pixel, which can display one color display dot. Therefore, a display with high resolution and high brightness can be made.

32/3,K/3 (Item 1 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
 (c) 2002 Thomson Derwent. All rts. reserv.

008418235 **Image available**
 WPI Acc No: 1990-305236/199040
 XRPX Acc No: N90-234596

Paging receiver with code controlled variable colour indicator - has transistorised visual alert and back - lighting circuits coupled to decoder for generating different colours

Patent Assignee: MOTOROLA INC (MOTI)
 Inventor: DELUCA M J; MCLAUGHLIN K T
 Number of Countries: 018 Number of Patents: 008
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9010998	A	19900920				199040 B
US 4975694	A	19901204	US 89322876	A	19890314	199051
EP 463093	A	19920102	EP 90905762	A	19900309	199202
JP 4504195	W	19920723	JP 90505456	A	19900309	199236
			WO 90US1254	A	19900309	
EP 463093	A4	19920422	EP 90905762	A	19900000	199521
EP 463093	B1	19960110	EP 90905762	A	19900309	199607
			WO 90US1254	A	19900309	
DE 69024793	E	19960222	DE 624793	A	19900309	199613
			EP 90905762	A	19900309	
			WO 90US1254	A	19900309	
KR 9407045	B1	19940803	WO 90US1254	A	19900309	199620
			KR 90702401	A	19901107	

Priority Applications (No Type Date): US 89322876 A 19890314

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9010998	A				
					Designated States (National): DK FI JP KR NO
					Designated States (Regional): AT BE CH DE DK ES FR GB IT LU NL SE
EP 463093	A				
					Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE
JP 4504195	W	9	H04B-007/26		Based on patent WO 9010998
EP 463093	B1 E	14	G08B-005/22		Based on patent WO 9010998
					Designated States (Regional): AT BE CH DE DK FR GB IT LI LU NL SE
DE 69024793	E		G08B-005/22		Based on patent EP 463093
					Based on patent WO 9010998
KR 9407045	B1		H04Q-007/00		

Paging receiver with code controlled variable colour indicator...

...has transistorised visual alert and back - lighting circuits coupled to decoder for generating different colours

...Abstract (Basic): signal is decoded by a decoder which is coupled to a code plug, visual alert, backlighting and display units. The address of the received decoded signal is compared with the address in the code plug. The visual alert unit produces different colours by light emitting diodes in a transistorised circuit whenever these addresses

are matched...

...Background **colour** of the liquid crystal display is determined by the **backlighting** circuit where the **colours** are selected according to the status of the pager or the received signals. Different **colours** are produced by modulating the voltage of an electroluminescent lamp acting as a load of...

...Abstract (Equivalent): comprising: receiving means for receiving and decoding an address wherein the paging receiver has a **predetermined** address with a **colour** sequence having a **plurality** of **colours** associated with the **predetermined** address, said receiving means generating a detect signal in response to the reception of the **predetermined** address; and illuminating means for generating a **plurality** of **colours** wherein said illuminating means, being responsive to the detect signal, generates a visual alert signal having the **colour** sequence associated with the **predetermined** address...

...Abstract (Equivalent): The paging receiver has an indicator capable of illuminating in one of a number of **colours**. The **colour** of illumination is selected in response to the address received by the pager...

...The indicator identifies the address by the **colour** illuminated...

...message is protected, read, about to be protected, or about to be deleted by the **colour** and **colour** sequence of the indicator. The **colour** indicator also indicates if the paging receiver is about to be turned off. The indicator may also serve as a **back - light** for a display when the paging receiver includes a display. Signals within the information to be displayed may change the **colour** or change the **intensity** of the **back - light**, these signals may also turn the **back - light** on or off. ADVANTAGE - Changes **colour** in response to address received by paging receiver...

...Title Terms: **COLOUR** ;

?